

IN THE CLAIMS:

1. (Currently Amended) A method of preparing for an injection procedure, the method comprising:

preprogramming or manually programming a predetermined fluid volume into a injector;

mounting a syringe comprising a distal end and the ~~the~~ plunger on an injector comprising a piston;

sensing from an encoding device that the syringe is mounted on the injector and is an empty syringe;

in response to sensing the syringe, automatically advancing the piston of the injector to engage the plunger of the syringe and to advance the plunger to the distal end thereof to expel air from the syringe;

retracting the piston based on the predetermined fluid volume to retract the plunger and aspirate fluid into the syringe; and

automatically advancing without operator input, the piston to prime the syringe and a tube connected to the syringe.

2.-4. (Canceled)

5. (Previously Presented) The method of claim 1, further comprising the step of advancing the piston to expel fluid from the syringe.

6. (Previously presented) The method of claim 1, further comprising the step of retracting the piston after the syringe is removed from the injector.

7. (Canceled)

8. (Currently Amended) A method of preparing for an injection procedure, the method comprising:

preprogramming or manually programming a predetermined fluid volume into a injector;

mounting a syringe comprising a distal end and a plunger on an injector comprising a piston;

sensing that the syringe is mounted on the injector;

automatically determining based on the sensing whether the syringe is an empty syringe, a preloaded syringe or a prefilled syringe;

in response to sensing the syringe, automatically, advancing the piston of the injector to engage the plunger of the syringe;

automatically advancing the piston of the injector to advance the plunger to the distal end of the syringe if the syringe is an empty syringe;

automatically retracting the piston based on the predetermined fluid volume to retract the plunger and aspirate fluid into the syringe if the syringe is an empty syringe; wherein the automatically advancing and retracting of the piston is without operator input; and

advancing the piston to prime the fluid path for the injection procedure.

9. -10 (Canceled)

11. (Currently Amended) A method of preparing for an injection procedure, the method comprising:

preprogramming or manually programming a predetermined fluid volume into a injector;

mounting a syringe comprising a distal end and a plunger on an injector comprising a piston;

advancing the piston of the injector to engage the plunger of the syringe and to advance the plunger to the distal end thereof;

retracting the piston based on the predetermined fluid volume to retract the plunger and aspirate fluid into the syringe; and

automatically advancing, without operator input, the piston to prime the syringe and a tube connected to the syringe, wherein the priming is based on a fluid volume of

the tube.

12. – 14. (Canceled).

15. (Previously presented) The method of Claim 11, further including advancing the piston during the step of retracting the piston to retract the plunger and aspirate fluid into the syringe, wherein the advancing decreases the amount of air aspirated into the syringe.

16. (Previously presented) The method of Claim 1, further including advancing the piston during the step of retracting the piston to retract the plunger and aspirate fluid into the syringe, wherein the advancing decreases the amount of air aspirated into the syringe.

17. (Previously presented) The method of Claim 8, further including advancing the piston during the step of retracting the piston to retract the plunger and aspirate fluid into the syringe, wherein the advancing decreases the amount of air aspirated into the syringe.

18. (New) The method of Claim 1, wherein the preprogramming is completed after mounting a syringe.

19. (New) The method of Claim 8, wherein the preprogramming is completed after mounting a syringe.

20. (New) The method of Claim 11, wherein the preprogramming is completed after mounting a syringe.